(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
7 December 2000 (07.12.2000)

PCT

(10) International Publication Number
WO 00/73951 A1

(51) International Patent Classification[6]: G06F 17/60, A47F 3/04, G07F 7/04

(21) International Application Number: PCT/US99/11964

(22) International Filing Date: 28 May 1999 (28.05.1999)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant and
(72) Inventor: VALLAIRE, Milton, E. [US/US]; P.O. Box 5218, Slidell, LA 70469-5218 (US).

(74) Agent: PUGH, C., Emett; Suite 2335, 601 Poydras, New Orleans, LA 70130 (US).

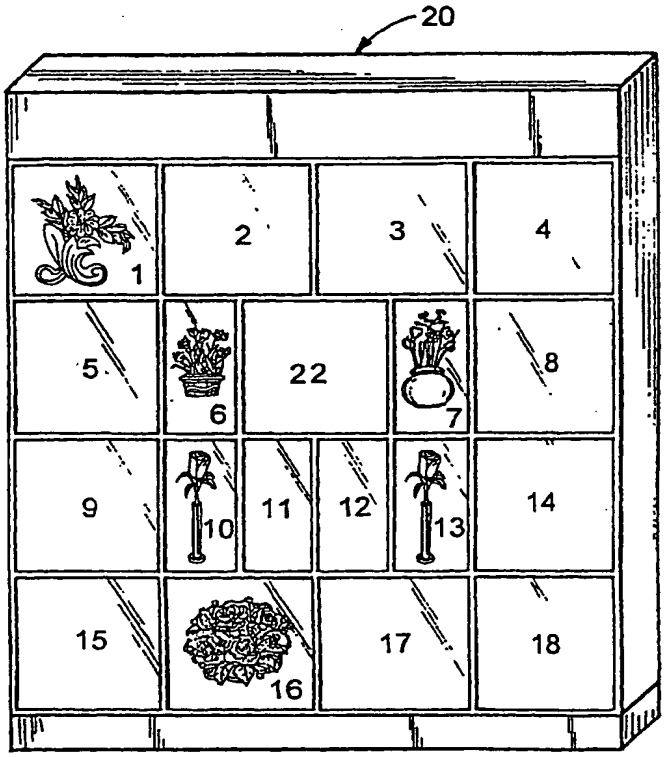
(81) Designated States *(national)*: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— *With international search report.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AUTOMATED GIFT ORDER AND DELIVERY SYSTEM



(57) Abstract: Automated florist or other gift delivery system, preferably including associated cooler (20, Fig. 1) and order taking control unit (22, Fig. 2), for automated vending and order placements for flowers and/or other gift items, .The system, with control unit being pre-programmed using appropriate logic (Figs. 3 and 7), allows a walk-up or drive-up customer to select from variety of pre-made flower arrangements from discrete cells equipped with the necessary refrigeration for immediate purchase, or, alternatively, a selection may be made, and information entered, for remote delivery at a specified time and place ("order form", Fig. 5). Additionally, operating, host florist can remotely monitor and conduct all business with vending machine from its shop (Fig. 4), with sole exception of stocking machine with items for immediate purchase; while sending of order to an affiliated florist for distant delivery is fully automated (Fig. 6), with direct contact between customer and delivering florist provided.

WO 00/73951 A1

AUTOMATED GIFT ORDER & DELIVERY SYSTEM

Technical Field

The invention is directed to an automated display and/or vending and order placement & fulfillment, computerized system preferably for flowers and/or other gift items typically handled by, for example, a florist shop, which system would typically be available to a customer on a twenty-four hour basis. More particularly, the invention makes available on a twenty-four hour basis items, such as flowers and/or other gifts, for, for example, remote delivery, and has the capabilities of transferring a delivery order to the proper person to conduct the remote delivery at, for example, a user designated time and place, while also preferably allowing for direct contact between the customer and the remote order fulfillment & delivery organization.

General Summary Discussion of Invention

The present invention allows a walk-up or drive-up customer, using the invention's automated, computerized, order taking and fulfillment system, to select from, for example, a variety of pre-made flower arrangements from discrete cells equipped with the necessary refrigeration for immediate purchase. In addition or alternatively, the system of the present invention is equipped with the computerized hardware and software necessary to allow the customer to select from a variety of floral and/or other gift items, enter a name and address to which the item is to be delivered, make payment for the item with cash or credit card or other appropriate financial authorization), and even communicate via, for example, a telephonic link with the florist or other, associated, order fulfillment & delivery organization who will be handling the remote delivery located perhaps hundreds or thousands of miles away.

The customer data entered can be used, if so desired, by the host organization (*e.g.* a host florist) and supplemented for subsequent use in, for example, direct mail or telephone or e-mail promotions or reminder systems in connection with,

for example, annually repeating events, such as, for example, birthdays, anniversaries, *etc.*, for subsequent querying the customer for repeat business. This supplemental use of the customer input data provides valuable marketing information, personalization of future customer contact, historical data, *etc.*, adding substantial business value to the system.

The unit into which the customer places a gift order to be delivered to a remote location too far away to be handled directly by the host organization of the invention automatically selects and forwards the order to a participating florist or other order fulfillment & delivery organization, preferably according to postal "zip" code, and issues the customer a receipt. Special handling procedures preferably will also be available.

The host organization for the order taking computerized station of the invention will be able to, for example, access the unit, track inventory, and process credit card payments via, for example, his/her in-house computer. This enables the operator to, for example, keep a fresh supply of flowers available in the machine at all times. The daily transaction report typically and preferably has at least the cooler sales, orders sent, and cash and credit card totals. The credit cards can be batched out, for example, on a daily basis.

The invention is adaptable for international applications with, for example, the simple addition of language translation software, which is readily available commercially. This would be a significant improvement over the prior art in that even international orders could be placed and delivered within twenty-four hours, without the necessity of a surcharge.

It should also be noted that, although a cooler arrangement for directly vending of flower arrangements is the preferred application of the invention, the principles of the present invention are also applicable to the ordering of flowers and other gifts from a computerized order taking and delivery assignment station as well, in which a cooler is not provided but only a display and associated computerized hardware and software. Likewise, although a florist type opera-

tion is the most preferred application, with the invention working particularly well in such an application, the basic principles of the invention are likewise applicable to other forms of gift ordering, fulfillment and remote delivery applications not involving flowers or flower arrangements, other examples being liquor, clothing items, household items, *etc.*.

Brief Description of Drawings

For a further understanding of the nature and objects of the present invention, reference should be had to the following detailed description, taken in conjunction with the accompanying drawings, in which like elements are given the same or analogous reference numbers and wherein:

Fig. 1 is a perspective, simplified view of a preferred, exemplary embodiment of a display cooler of the present invention.

Fig. 2 is a frontal, simplified, detailed or close-up view of the preferred, exemplary embodiment of the "control unit" of the display cooler of **Fig. 1**.

Fig. 3 is a schematic block diagram or logic flow chart of the preferred, exemplary embodiment for the consumer sales flow program for the program logic or algorithm for the programmable control circuitry of the present invention.

Fig. 4 is a schematic block diagram of the preferred, exemplary embodiment for the host florist data program structure for the programmable control circuitry showing information available and functional capabilities of exemplary, preferred embodiment of the present invention.

Fig. 5 is an exemplary order form screen display for "option 2" of the logic flow chart of **Fig. 3**.

Fig. 6 is a simplified, schematic block diagram of the preferred, exemplary embodiment of the over-all system of the present invention, illustrating in schematic form the automated order forwarding communications to an associated florists, as well as the remote data access communication for the host florist for the data outlined in **Fig. 4**.

Fig. 7 is a schematic block diagram or logic flow chart of the preferred, exemplary embodiment for the consumer sales flow program for the program logic or algorithm for the programmable control circuitry of the present invention, supplementing the logic of **Fig. 3**..

Exemplary Mode for Carrying Out the Invention

The present invention makes available florist products and services at remote locations and on a twenty-four hour, seven day (24/7) basis. As shown in **Fig. 1**, the present invention is contained in a display cooler **20**. The display cooler may be suitable for outdoor display and/or indoor display and may be accessible for walk-up service and/or drive-up service.

The cooler **20** has a plurality of, for example, eighteen discrete cells **1-18**, which are refrigerated or not, based upon their contents. The cells **1-18** may contain, for example, flowers, in which case they are refrigerated, or various, non-perishable gift items in which case they would not have to be refrigerated. The presently preferred embodiment utilizes all refrigerated cells for the most versatility.

The display cooler **20** requires a supply of electricity, a computer processor, associated, programmable circuitry and memory, and a telephone line, all as generally known in the art. The exemplary embodiment as shown in **Fig. 1**, is, for example, eighty-seven (87") inches high, twenty-six (26") inches wide, and ninety-six (96") inches long, weighing approximately six hundred and fifty (650 lbs.) pounds, and uses, for example, one hundred ten (110V) volts of electricity. Of course, these parameters are exemplary only and are subject to a variety of changes.

At the center of the display cooler **20** is a control unit **22** (see **Figs. 1 & 2**). The control unit preferably has a touch-sensitive monitor **23** for communicating the necessary information described below to the customer and for allowing the customer to input necessary data. Of course, a conven-

tional keypad and a non-touch sensitive monitor could be substituted, if so desired.

The control unit **22** also utilizes a customer presence detector **24** to alert the computer to the presence of a customer, and allows for various payment options. The payment options preferably include a bill changer **25**, for accepting a variety of denominations of bills, a coin acceptor slot **26**, a coin return **27** for making change, and a credit card insertion slot **28** for accepting credit cards. Through these units the customer may make payment for his/her purchase with cash or credit card.

In operation, the system of the present invention gives a customer a variety of menu choices when he/she approaches the display cooler **20**. As schematically represented in the logic flow chart of **Fig. 3**, the computer processor is prompted (step **30**) by the customer presence detector **24**.

This prompt begins an approximately two (2) minute long set of instructions about using the system and its purchasing options (step **31**). These instructions may be by-passed by the user at any given time, and the customer may either directly proceed with a purchase or go back to the main menu.

After the instructions are over, the customer is given a choice (step **32**) of "option 1", namely, purchasing an item for immediate sale out of one of the display cooler cells (1-18), or "option 2", namely, choosing an item for remote delivery (note **Fig. 5**). In the event that the customer makes no choice, or walks away, the computer will automatically return the system to the main menu if it has been idle for a set period of time (step **34**); for example, three (3) minutes. In addition, the customer is given the option of returning to the main menu (step **33**) at any time during the operation of the vending system, which would start the customer over from the beginning, canceling any previously input information.

If the customer chooses "option 1" (step 40), by pressing an identified "button", a price display (step 41) for the various items in the display cooler is shown, and the customer is instructed to choose one or more items for purchase. Once the customer has selected the desired item(s), a display showing the price and sales tax (step 42) will appear. The customer is instructed or informed of their payment options, cash or credit card (step 43), and, once the payment transaction is complete, the appropriate cell door(s) is/are opened (step 44), and the customer may remove the selected item(s). The system prints a receipt at slot 29 for the customer's purchase (2nd part of step 44), and then the computer automatically returns to the main menu (step 45).

If the customer chooses "option 2" (step 50), by pressing an identified "button", an order entry form (step 51) is displayed, it being noted that an exemplary form is illustrated in **Fig. 5**. The customer must input the required information, namely, for example, the name, address, telephone number, "zip" code, delivery date, card message, for the desired delivery, as well as the customer information, or the system preferably will not allow the procedure to proceed (step 52).

Once the order information is completed (step 53), the price, delivery charge, and sales tax are computed (step 54). As in "option 1", the customer is instructed or informed of their payment options (step 55), cash or credit card. Once the payment transaction is complete, the order preferably is faxed (step 56) to the appropriate associated florist, with the associated florist chosen by, for example, a postal "zip" code comparison to the "zip" code of the indicated desired delivery location.

The customer is also given the option to talk to the delivery florist, if the florist's posted hours permit (step 57). If the delivery florist is closed, then the customer is

given the option to talk to a florist operator affiliated with the host florist, if it is not closed, or, optionally, to a twenty-four hour available operator affiliated with, for example, the supplier of the computerized cooler system **20**, to communicate any special delivery information (step **58**). If the customer chooses not to speak with anyone, or after he/she has spoken to the florist or operator, the programmed computer causes a receipt to be printed for the purchase (step **59**) that preferably includes all of the details of the sale and the delivering florist information, as well as, optionally, the host florist, and then returns to the main menu screen (step **60**).

As brought out more fully in the supplementary logic chart of **Fig. 7**, in supplementing step **51** *et seq.* of **Fig. 3**, in step **51A** the order entry mode is begun, and the order from is displayed (step **51B**, as in step **51** of **Fig. 3**). A teleprompter in the form of, for example, a voice messenger and/or a flashing display, is active at each subsequent discrete step, and, if there is no activity for, for example, two minutes, the system is re-set to the main menu (step **51**), *i.e.*, to step **30** of **Fig. 3**.

In step **52A** prompts for the preferred date, time (optional), phone number (ideally) & address of the recipient of the gift (*e.g.* a flower arrangement to be selected by the customer) are answered by the customer (required) **52A**, the type of occasion (if any), and the card message for accompanying the gift to be delivered are filled out (step **52B**) or not (step **52C**) as desired by the customer. The selection guide is opened and/or a web link guide established (if web access is included in the system), and the gift selection is made by the customer (step **52D**, comparable to step **53** of **Fig. 3**).

The delivery charge & sales tax are computed (step **54**, as in **Fig. 3**), with the customer's name, address, etc., information (optional) for the customer's receipt, with cash or credit

card (or smart card or other financial authorization) information put in by the customer (step **54A**). The customer can remain anonymous in a cash transaction (step **55A**), but for a credit transaction the appropriate information must be put in by the customer directly and through the use of the customer's credit card (steps **54A** & **55B**), including the customer's personal identification number (PIN) or other informational code (step **55C**).

The control unit's central processing unit (CPU) and associated programmed logic within the order taking station directly select the remote order fulfillment & delivery organization (*e.g.* remote florist) for a remote gift delivery order and activates, for example, an associated modem (see **Fig. 6**) and the order and related information is sent directly to the delivery organization (*e.g.* remote florist; step **56A**). The customer has the option to speak directly to the remote delivery organization or remote florist filling the order (step **57**) or, if so desired, the customer may be provided with the option of speaking to, for example, a floral consultant (step **58A**).

A built-in printer activates and a receipt is printed with the complete order information, along with the cost, confirmation number and the delivering organization (*e.g.* the delivering florist's) address and phone number (step **59A**). This completes the transaction, and, with the order, selection, receipt and sending process completed, the system returns to its order entry mode (step **51A**) to await the next order (step **60**).

Additional features of the present invention help the host organization (*e.g.* florist) access information on the sales handled by the vending system via, for example, remotely using a modem telecommunications hook-up, using computerized equipment well known in the art. As shown in **Fig. 4**, the host florist may both monitor (**70**) the vending system and generate desired reports (**71**). Among the preferred capabilities of the

vending system of the invention are the ability to monitor cash and credit card sales (72), generate credit card batch reports (73), monitor the display cooler inventory (74), generate local delivery reports 75, generate copies of all orders (total sales report) placed at the vending system 76, and send out (*i.e.* wire out) order reports 77 to associated florists. In essence, the host florist will be able monitor and conduct all business for the vending system from the host florist's shop, with the exception of restocking the inventory in the display cooler 20. Additionally, in step 55D the credits or revenues from credit card orders obtained in combined steps 54A & 54B of **Fig. 7**, can be automatically deposited in the host florist's bank account.

As can be seen in **Fig.** 6, the over-all system for the automated florist delivery system of the invention, includes not only the display cooler 20 with its computerized control unit 22 and associated order taking station discussed above, but preferably also an integrated, fax/data modem 80 used to communicate the order data to the selected, associated florist's shop 81 for delivery of the order to the distant location, using an appropriate data communication link 82.

This link 82 typically can be the telephone ("TelCo") system, using, for example, plain, old telephone system ("POTS") lines, with the data being transmitted, for example, in "fax" or facsimile form. Alternatively, for further example, the communication link 82 could be "wireless" rather than by "hard wire" or include an appropriate link to the internet or "world wide web" for down-loading or "e-mail" forwarding of the "order" data to the associated florist's shop 81, or the telecommunication links of various organizations, such as "FTD" or "TeleFlora", *etc.*, could be used.

Likewise, the over-all system includes an appropriate communications link 83 to the host florist's shop or other pertinent location 84, to allow the host florist to access or

receive the data being accumulated and stored in "memory" (*e.g.*, in a removable or fixed "hard disk") contained in the cooler system **20** and associated with the control unit **22**. Regardless of what type of communications links **82**, **83** is used, it preferable that a telephone link or jack **85** still be included in the system to allow for the "direct" telephonic communication between a customer and the florist (associated remote or relatively nearby, host as appropriate) or other pertinent operator.

It is noted that typically the home location of the host florist, *i.e.*, where the florist's florist shop is located, will be located a significant distance from the display cooler **20**, usually the equivalent of at least a few city blocks and more usually a matter of some miles from the display cooler(s) the florist is operating. Likewise, the location for remote delivery of a customer order is typically to a location substantially away from the location of the display cooler **20**, typically a number of miles and potentially hundreds and even thousands of miles away.

It is further noted that the system of the present invention is appropriate for both national and international usage. In the event that an international order is made, appropriate language translation software, which is commercially available, would be utilized to automatically make what ever language conversions might be necessary in transmitting, for example, the "order" information or data to an associated, order fulfillment and delivery organization (*e.g.* very remote florist) in the foreign country into which the delivery of the floral arrangement or gift is to be made.

Credit card security algorithms and other general security items can be added to the logic of the control system or the over-all system, to track, catch and thwart fraudulent card usage and/or vandalism.

For example, a video or still digital camera could be included in or separately located adjacent to the cooler display unit **20**, storing and/or sending digital images over the

telecommunications link 83 for data recording and/or supervisory image viewing at, for example, the host florist's site 84. This camera subsystem produces digital image information, typically of the area in front of the display cooler 80 and sends the digital image information over the telecommunications link 83 to the host florist's site 84.

Additionally, based on either prior "bad" use of the subject credit card previously at one of the host florist's systems or information received from the credit card issuer or a credit reporting agency, the usual control unit logic could be automatically by-passed and the credit card user (potentially a fraudulent or delinquent user) "locked out" of the use of the cooler system 20.

It should be noted that, in using the phrase "credit card" in this specification, such is intended to include both "credit" and "debit" type cards and the like, wherein a card, typically plastic, is used in order to effectively make payment for an item without directly using cash money or other forms of legal tender or barter for payment. Typically the card will be issued by a financial institution to the customer under an appropriate financial arrangement, in which the card issuer pays the vendor (here, for example, the host florist) and the issuer in turn receives payment from the customer or otherwise obtains payment from a customer asset, such as the customer's checking account. Similar financial authorization may be obtained by using smart cards or other automated, financial authorizations.

As noted above, although a cooler arrangement for directly vending of flower arrangements is the preferred application of the invention, the principles of the present invention are also applicable to the ordering of flowers and other gifts from a computerized order taking and delivery assignment station as well, in which a cooler is not provided. Likewise, although a florist type operation is the most preferred application, with the invention working particularly well in such an application, the basic principles of the invention are likewise applicable

to other forms of gift ordering, fulfillment and remote delivery applications not involving flowers or flower arrangements. [also reference Fig. 7]

Thus, the present invention may, of course, be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention. The present exemplary embodiment is, therefore, to be considered as illustrative and not restrictive.

Thus, it is further noted that the embodiment(s) described herein in detail for exemplary purposes are of course subject to many different variations in structure, design, application and methodology. Because many varying and different embodiments may be made within the scope of the inventive concept(s) herein taught, and because many modifications may be made in the embodiments herein detailed in accordance with the descriptive requirements of the law, it is to be understood that the details herein are to be interpreted as illustrative and not in a limiting sense.

Claims

What is claimed is:

1. A computerized, automated florist system, for use at a customer ordering location remote from a florist shop, providing twenty-four hour, florist-like services using a number of remotely located, associated florists for remotely located deliveries, comprising:

a display and dispensing cooler having discrete cells for displaying for viewing at least pre-made flower arrangements and being equipped with refrigeration to cool the pre-made flower arrangements and located away from any human vending flower operation; and

an order taking control unit physically associated with said cooler for automated vending, order placement and order fulfillment assignment specifically for at least flower arrangements, said order taking control unit being pre-programmed using computer logic, allowing a human customer located adjacent to said cooler to select from a variety of pre-made flower arrangements located in said discrete cells for immediate purchase without the need for vendor human intervention or assistance, or, alternatively, a selection may be made, and information entered, for remote delivery at a specified, distantly located place of an ordered item using credit card or other smart card or other financial authorization, again without the need for vendor human intervention or assistance at said cooler, with said order taking control unit itself, in the case of an order for remote delivery of the customer selected item at a customer specified, distantly located place, assigning an associated florist for fulfillment of the order for actually making the remote delivery at the customer specified, distantly located place.

2. The automated, computerized florist system of **Claim 1**, wherein said display cooler is serviced by a host florist shop located some significant distance of at least some blocks from the physical location of the host florist, and wherein there is further included a monitoring unit associated with said order taking control unit comprising:

electronic, computerized equipment including report and monitoring logic programming, allowing a operating, host florist associated with the display and dispensing cooler to remotely monitor and conduct all business directly concerned with the cooler from the operating florist's shop, except for the stocking of said display cooler with items for immediate purchase.

3. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order forwarding report logic programming, causing the sending of an order to an affiliated florist for a distant delivery to be automated.

4. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming, allowing the customer to select from a variety of floral and/or gift items, enter a name and address to which the selected item is to be delivered, and make payment for the item with cash or credit or other smart card.

5. The automated, computerized florist system of **Claim 4**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming and associated telecommunication equipment, allowing the customer to speak directly to the florist assigned to the delivery of the selected item to the address entered by the customer.

6. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming and associated data storage equipment, causing the data provided by the customer and the customer's credit or other smart

card to be stored, subsequently retrieved and used for future marketing purposes for repeat business with that customer.

7. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming and associated telecommunication equipment, assigning the delivery of the selected item to a remote florist for making the delivery of the selected item, taking into account "zip" code data of the delivery point and the "zip" code of the florist to which the order is assigned.

8. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment proximate to said cooler including order processing logic programming and associated telecommunication equipment, allowing the host florist to access the unit by said telecommunication equipment and thereby track inventory, and process credit or other smart card payments via a computer located at the host florist site and further enabling the host florist to keep a fresh supply of flowers available in the machine at all times.

9. The automated, computerized florist system of **Claim 8**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming capable of generating a timely transaction report including at least the following data since at least the last transaction report — itemized cooler sales, itemized orders sent via telecommunications, and cash and credit/smart card totals.

10. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming allowing for international deliveries of the selected item(s), said programming including language translation software.

11. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming, said computerized equipment including a computer processor, associated, programmable circuitry and memory, including both RAM and long term storage memory, a telephone line link, and an electrical power supply.

12. The automated, computerized florist system of **Claim 2**, wherein said order taking control unit further comprises:

electronic equipment including a camera subsystem producing digital image information of the area in front of said display cooler and located in associated with said display cooler and sending said digital image information over said telecommunications link to the host florist's site.

13. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including customer presence detector and associated logic programming, which alerts the computer equipment to the presence of a customer in front of said display cooler and which provides information and instructions to the customer about using the system and its purchasing options.

14. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment including order processing logic programming, said computerized equipment including a touch-sensitive monitor for communicating order placing information to the customer and for allowing the customer to input ordering data.

15. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment proximate to said cooler including automated means which automatically faxes the order information for a remote delivery of a customer selected item to an associated florist assigned by said order taking control unit to handle the remote delivery.

16. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment proximate to said cooler including a telephonic link allowing a customer who orders an item for remote delivery to talk directly to the associated florist assigned by said order taking control unit to fulfill the remote delivery of the customer selected item.

17. The automated, computerized florist system of **Claim 1**, wherein said order taking control unit further comprises:

electronic, computerized equipment proximate to said cooler including a printer which prints out the details of an order involving a remote delivery of a customer selected item including information identifying for the customer the associated florist assigned to fulfill the remote delivery.

18. A method of automatically vending flowers, gift items and other items at a location significantly away from a florist's site, comprising the steps of:

(a) using an automated ordering system including—

— a display and dispensing cooler having discrete cells for displaying for viewing at least pre-made flowers arrangements and being equipped with refrigeration to cool the pre-made flower arrangements and being located away from any human vending flower operation, and

— an order taking control unit physically associated with said cooler for automated vending and order placement specifically for at least flower arrangements and gift items, said order taking control unit being pre-programmed using computer logic, allowing a human customer located adjacent to said cooler to select from a variety of pre-made flower arrangements located in said discrete cells for immediate purchase without the need for vendor human intervention or assistance, or, alternatively, a selection may be made, and information entered, for remote delivery at a specified, distantly located place using credit card or other smart card or other financial authorization, again without the need for vendor human intervention or assistance at said cooler;

(b) having said order taking control unit programmed to allow the customer physical access to the appropriate display cell containing a customer selected item after an acceptable financial payment arrangement has been made, and havng it programmed to directly transmit electronically the order data, after an acceptable financial payment arrangement has been made, to a location of a remotely located, associated florist determined and assigned by the order taking control unit itself for the fulfillment of a customer placed order involving the delivery of a customer selected item to a location at a substantial distance from said display cooler.

19. The automatic flower vending method of **Claim 17**, wherein, when the customer places an order for a remote delivery, there is included in step "b" the further step of -

the order taking control unit faxing a copy of the order information directly to the remotely located, associated florist assigned to fulfill the delivery of the customer selected item.

20. The automatic flower vending method of **Claim 17**, wherein, when the customer places an order for a remote delivery, there is included in step "b" the further step of -

allowing the customer to talk directly to the remotely located, associated florist, who has been assigned to fulfill the remote delivery of the customer selected item by the control unit, via a telephonic link from the location of the display and dispensing cooler directly to the associated florist.

21. The automatic flower vending method of **Claim 17**, wherein, when the customer places an order for a remote delivery, there is included in step "b" the further step of -

printing a receipt for the customer at the time of the order that includes the details of the sale and information identifying the delivering florist assigned to fulfill the remote delivery of the customer selected item.

22. A method of automatically vending flower arrangements, gift items or other items at a location significantly away from a florist's site for delivery of a customer selected item to a customer determined remote location at least a number of miles away from where the customer is located when placing the order, comprising the steps of:

(a) providing an automated ordering system for use by the customer including an order taking control unit for automated order placement by the customer specifically for a customer selected item, said order taking control unit being preprogrammed using computer logic, allowing the customer located adjacent to said control unit to select and enter information for remote delivery of the customer selected item at a specified, distantly located place determined by the customer, using credit card or other smart card or other financial authoriza-

tion to pay for the order, without the need for vendor human intervention or assistance at said unit;

(b) having said order taking control unit programmed to allow the customer to place an order for a customer selected item for remote delivery determined by the customer of the customer selected item, and having said order taking control unit further programmed to transmit electronically the order data, after an acceptable financial payment arrangement has been made, to the location of a remotely located, associated florist determined and assigned by the order taking control unit itself for fulfillment of the customer placed order involving the remote delivery of the customer selected item to the customer determined location located at a substantial distance of at least a number of miles from said order taking unit.

23. The automatic flower vending method of **Claim 22**, wherein there is included in step "b" the further step of -

having the order taking control unit programmed to fax the order information directly to the remotely located, associated florist assigned by the control unit to fulfill the remote delivery of the customer selected item.

24. The automatic flower vending method of **Claim 22**, wherein there is included in step "b" the further step of -

having the order taking control unit programmed to allow the customer to talk directly to the remotely located, associated florist, who was assigned by the control unit to fulfill the remote delivery of the customer selected item, via a telephonic link from the location of the order taking control unit to the associated florist.

25. The automatic flower vending method of **Claim 22**, wherein there is included in step "b" the further step of -

having the order taking control unit programmed to automatically print a receipt for the customer at the time of the order that includes the details of the sale and information identifying the delivering florist assigned by the control unit to fulfill the remote delivery of the customer selected item.

26. A computerized method of automatically taking orders at a computerized station and delivering gift items for delivery of a customer selected item to a customer determined remote location at least a number of miles away from where the customer is located when placing the order at the computerized station, comprising the steps of:

(a) providing in the computerized station an automated ordering system for use by the customer including an order taking control unit for automated order placement by the customer specifically for a customer selected item, said order taking control unit being pre-programmed using computer logic, allowing the customer located adjacent to said control unit to select and enter information for remote delivery of the customer selected item at a specified, distantly located place determined by the customer, using credit card or other smart card or other financial authorization to pay for the order, without the need for vendor human intervention or assistance at the computerized station;

(b) having said order taking control unit programmed to allow the customer to place an order for a customer selected item for remote delivery determined by the customer of the customer selected item, and having said order taking control unit further programmed to transmit electronically the order data, after an acceptable financial payment arrangement has been made, to the location of a remotely located, associated, order fulfillment and delivery organization determined and assigned by the order taking control unit itself for fulfillment of the customer placed order involving the remote delivery of the customer selected item to the customer determined location located at a substantial distance of at least a number of miles from said order taking unit.

27. The automatic flower vending method of **Claim 26**, wherein there is included in step "b" the further step of -

having the order taking control unit programmed to fax the order information directly to the remotely located, associated delivery organization assigned by the control unit to fulfill the remote delivery of the customer selected item.

28. The automatic flower vending method of **Claim 26**, wherein there is included in step "b" the further step of -

having the order taking control unit programmed to allow the customer to talk directly to the remotely located, associated, order fulfillment, delivery organization, who was assigned by the control unit to fulfill the remote delivery of the customer selected item, via a telephonic link from the location of the order taking control unit to the associated, remotely located, order fulfillment, delivery organization.

29. The automatic flower vending method of **Claim 26**, wherein there is included in step "b" the further step of -

having the order taking control unit programmed to automatically print a receipt for the customer at the time of the order that includes the details of the sale and information identifying the associated, remotely located, order fulfillment, delivery organization assigned by the control unit to fulfill the remote delivery of the customer selected item.

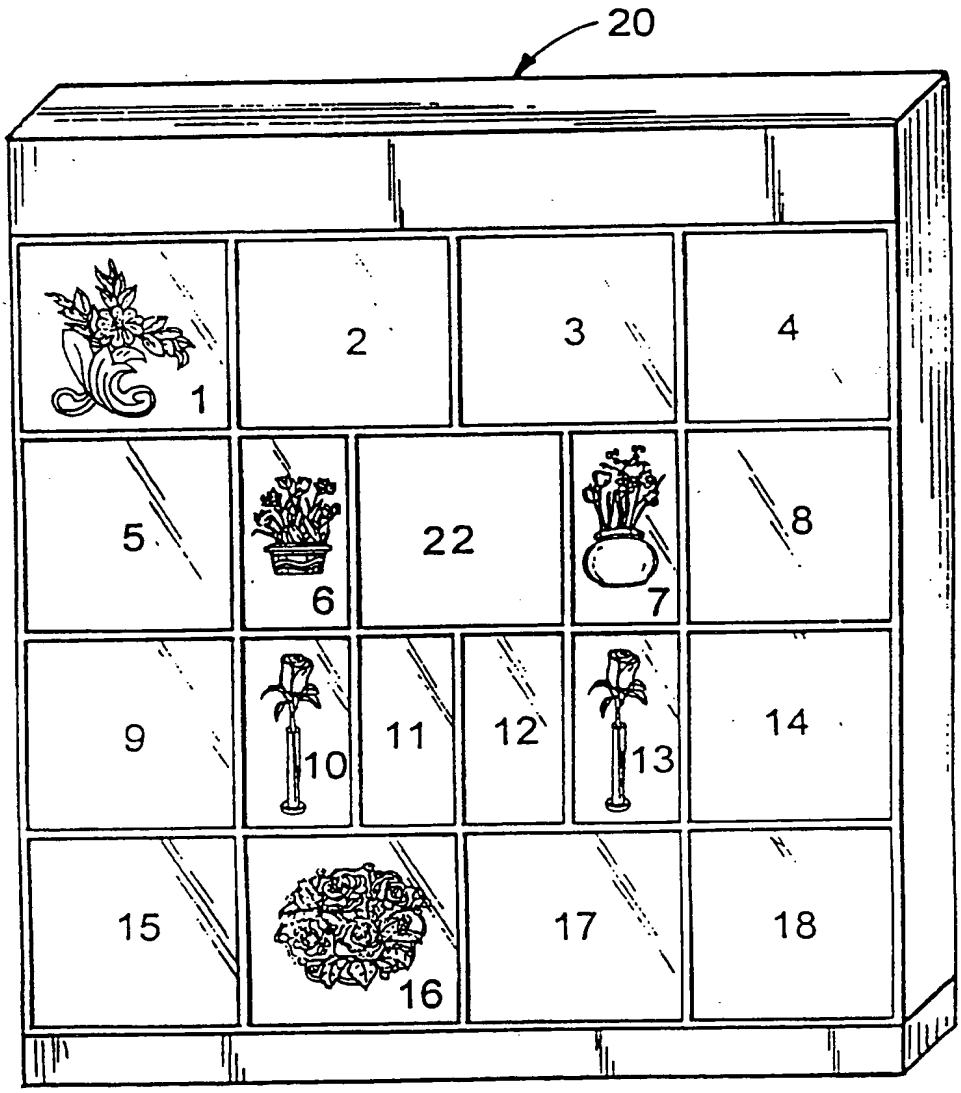


FIG. 1

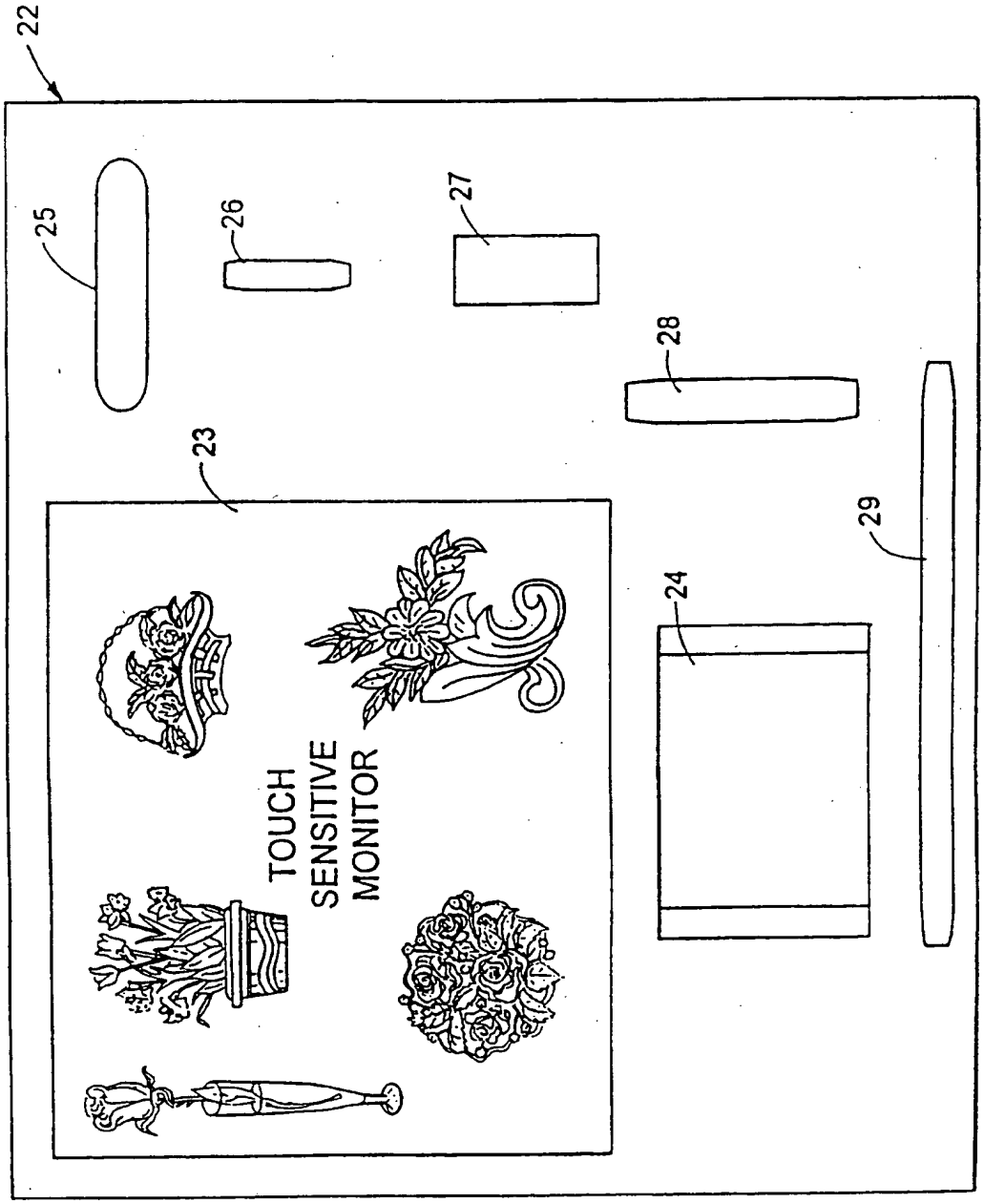


FIG. 2

ORDER FORM: OPTION # 2 SAMPLE ORDER

51

FAX ORDER DIRECT

****

ORDER DATE: 05/09/97 **DELIVERY DATE:** 05/11/97
SPECIAL INSTRUCTIONS: _____
SEND TO: MONALISA TINDOAY **TEL:** [899] 735-3316
EXT: _____
DELIVERY ADDRESS: 225 BIG STAKES PKWY.
C/O BURNS & ALLEN
SAN FRANCISCO, CA. 89761

DRICPTION:
1st. CHOICE, ARRANGEMENT OF 1 DZ. RED ROSES
2nd. " " " 2 dz. ANY COLOR

_____ AMOUNT IN US DOLLARS:	$ 50.00
DELIVERY CHARE:	5.00
SUB TOTAL:	55.00
LOCAL SALES TAX: 6%	3.30
	$ 58.30

CARD MESSAGE:
HAPPY BIRTHDAY CARD
I LOVE YOU,
CHUCK

COMMENTS: IF THERE IS ANY PROBLEM WITH TIMELY DELIVERY CONTACT CUSTOMER AT ONCE.
CHUCK JOHNSON & SHERIDAN PLANTS & FLOWERS

****

CUSTOMER INFORMATION:

	FIRST	MIDDLE	LAST
NAME:	_____	_____	_____

	HOME	WORK
YOUR TEL NO:	[ ] - _____	[ ] - _____

ADDRESS: _____

CITY: _____ **STATE:** ___ **ZIP:** _____

AT THIS POINT CUSTOMER IS ASKED TO SELECT CASH OR CREDIT CARD PRESS 1 FOR CASH OR 2 FOR CREDIT CARD.

FIG. 5

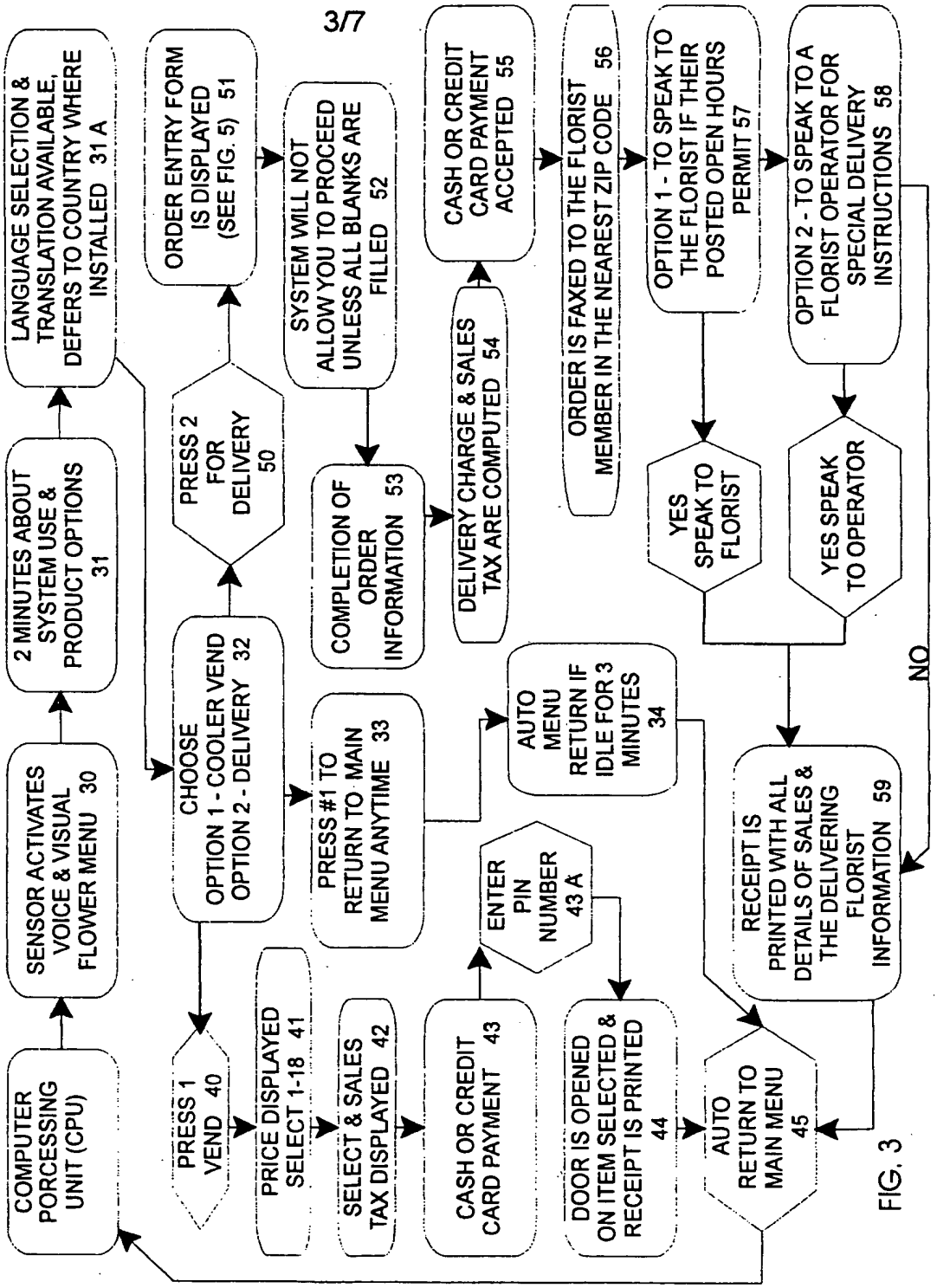

COMPUTER PORCESSING UNIT (CPU)
SENSOR ACTIVATES VOICE & VISUAL FLOWER MENU 30
2 MINUTES ABOUT SYSTEM USE & PRODUCT OPTIONS 31
LANGUAGE SELECTION & TRANSLATION AVAILABLE, DEFERS TO COUNTRY WHERE INSTALLED 31 A
CHOOSE OPTION 1 - COOLER VEND OPTION 2 - DELIVERY 32
PRESS 1 VEND 40
PRICE DISPLAYED SELECT 1-18 41
SELECT & SALES TAX DISPLAYED 42
CASH OR CREDIT CARD PAYMENT 43
ENTER PIN NUMBER 43 A
DOOR IS OPENED ON ITEM SELECTED & RECEIPT IS PRINTED 44
AUTO RETURN TO MAIN MENU 45
PRESS 2 FOR DELIVERY 50
ORDER ENTRY FORM IS DISPLAYED (SEE FIG. 5) 51
SYSTEM WILL NOT ALLOW YOU TO PROCEED UNLESS ALL BLANKS ARE FILLED 52
COMPLETION OF ORDER INFORMATION 53
DELIVERY CHARGE & SALES TAX ARE COMPUTED 54
CASH OR CREDIT CARD PAYMENT ACCEPTED 55
ORDER IS FAXED TO THE FLORIST MEMBER IN THE NEAREST ZIP CODE 56
OPTION 1 - TO SPEAK TO THE FLORIST IF THEIR POSTED OPEN HOURS PERMIT 57
OPTION 2 - TO SPEAK TO A FLORIST OPERATOR FOR SPECIAL DELIVERY INSTRUCTIONS 58
PRESS #1 TO RETURN TO MAIN MENU ANYTIME 33
AUTO MENU RETURN IF IDLE FOR 3 MINUTES 34
YES SPEAK TO FLORIST
YES SPEAK TO OPERATOR
RECEIPT IS PRINTED WITH ALL DETAILS OF SALES & THE DELIVERING FLORIST INFORMATION 59
NO

FIG. 3

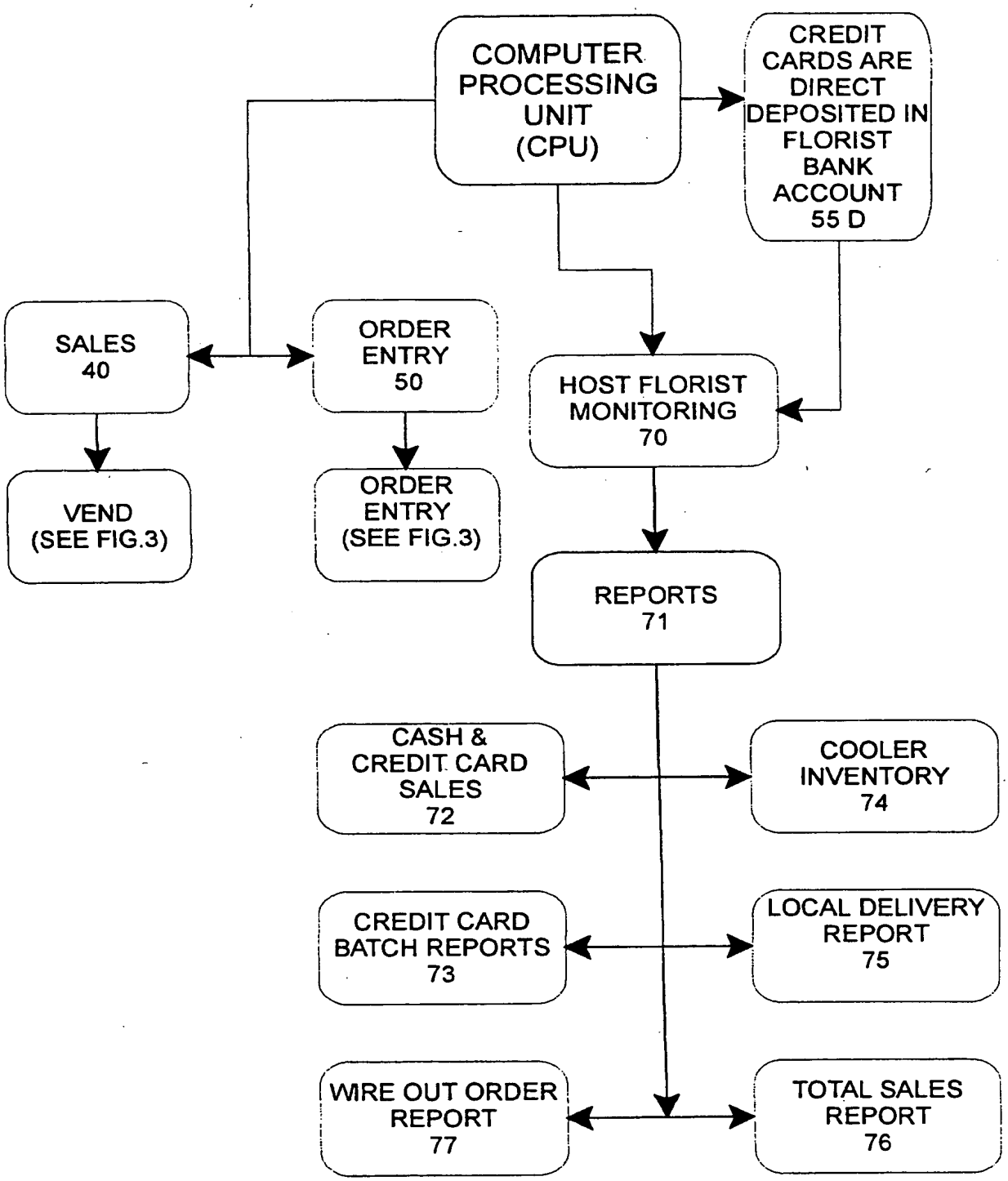

COMPUTER PROCESSING UNIT (CPU)
CREDIT CARDS ARE DIRECT DEPOSITED IN FLORIST BANK ACCOUNT 55 D
SALES 40
ORDER ENTRY 50
HOST FLORIST MONITORING 70
VEND (SEE FIG.3)
ORDER ENTRY (SEE FIG.3)
REPORTS 71
CASH & CREDIT CARD SALES 72
COOLER INVENTORY 74
CREDIT CARD BATCH REPORTS 73
LOCAL DELIVERY REPORT 75
WIRE OUT ORDER REPORT 77
TOTAL SALES REPORT 76

FIG. 4

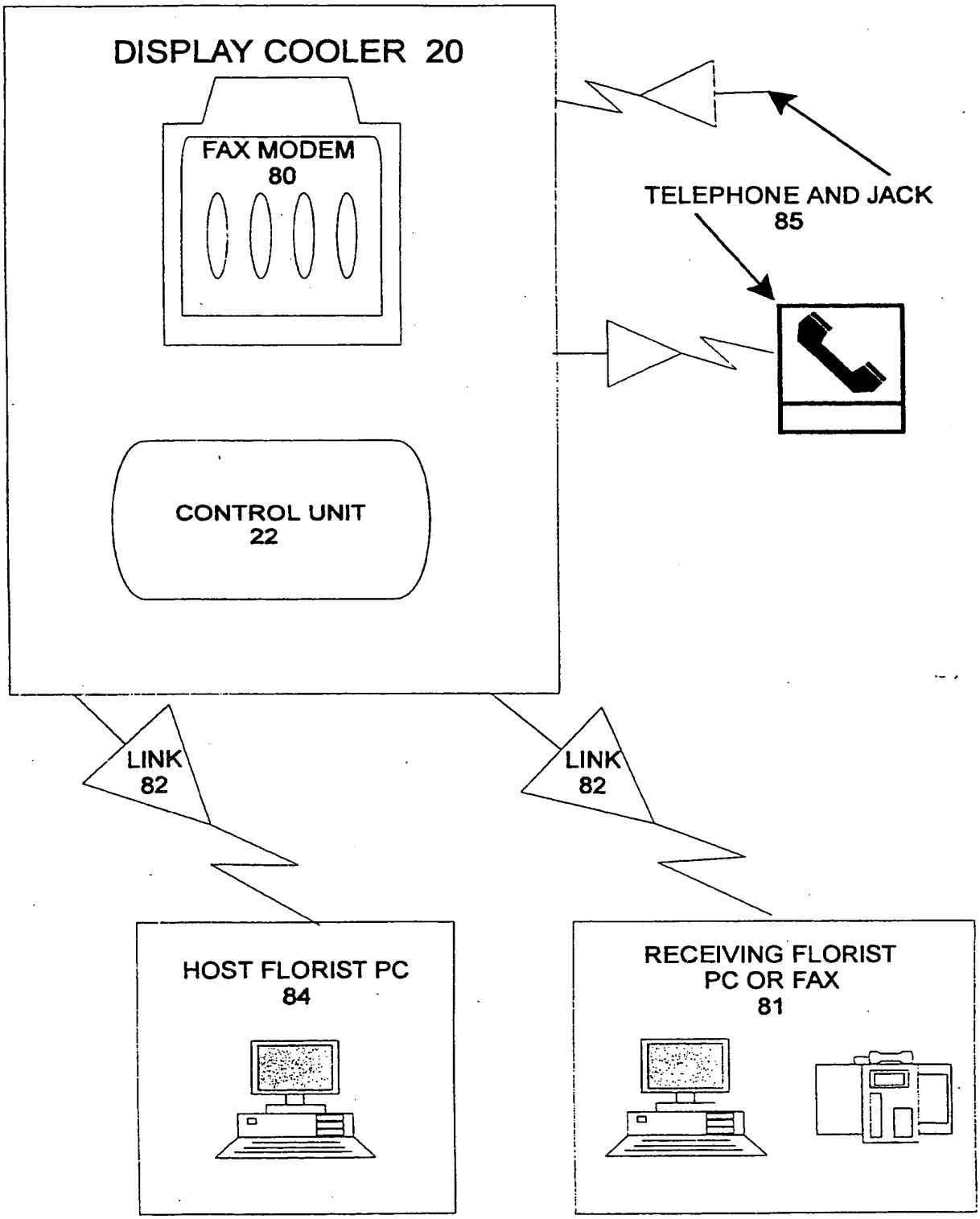

DISPLAY COOLER 20
FAX MODEM
80
TELEPHONE AND JACK
85
CONTROL UNIT
22
LINK
82
LINK
82
HOST FLORIST PC
84
RECEIVING FLORIST
PC OR FAX
81

FIG. 6

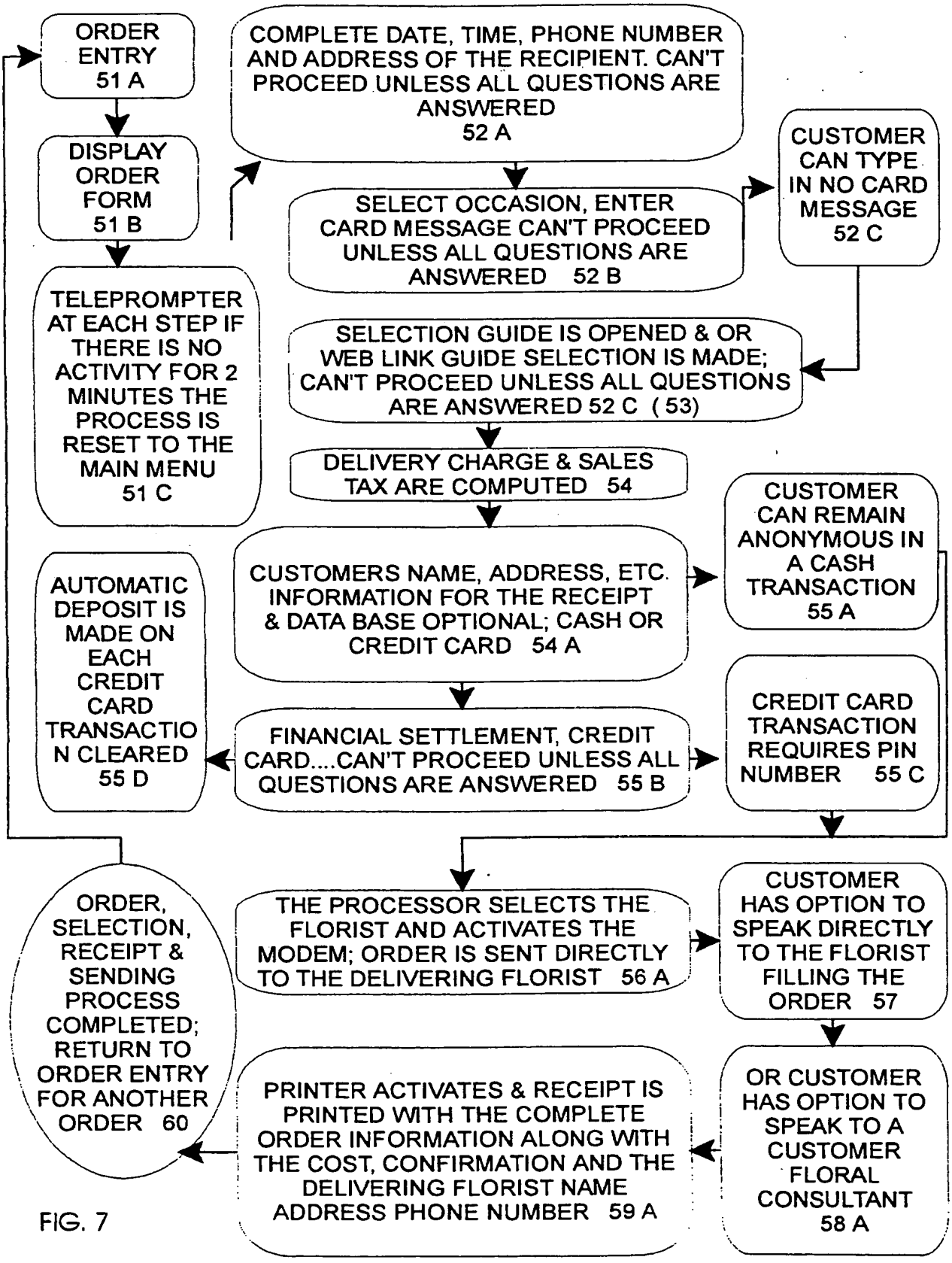

ORDER ENTRY 51 A
DISPLAY ORDER FORM 51 B
TELEPROMPTER AT EACH STEP IF THERE IS NO ACTIVITY FOR 2 MINUTES THE PROCESS IS RESET TO THE MAIN MENU 51 C
COMPLETE DATE, TIME, PHONE NUMBER AND ADDRESS OF THE RECIPIENT. CAN'T PROCEED UNLESS ALL QUESTIONS ARE ANSWERED 52 A
SELECT OCCASION, ENTER CARD MESSAGE CAN'T PROCEED UNLESS ALL QUESTIONS ARE ANSWERED 52 B
CUSTOMER CAN TYPE IN NO CARD MESSAGE 52 C
SELECTION GUIDE IS OPENED & OR WEB LINK GUIDE SELECTION IS MADE; CAN'T PROCEED UNLESS ALL QUESTIONS ARE ANSWERED 52 C (53)
DELIVERY CHARGE & SALES TAX ARE COMPUTED 54
CUSTOMERS NAME, ADDRESS, ETC. INFORMATION FOR THE RECEIPT & DATA BASE OPTIONAL; CASH OR CREDIT CARD 54 A
CUSTOMER CAN REMAIN ANONYMOUS IN A CASH TRANSACTION 55 A
FINANCIAL SETTLEMENT, CREDIT CARD....CAN'T PROCEED UNLESS ALL QUESTIONS ARE ANSWERED 55 B
CREDIT CARD TRANSACTION REQUIRES PIN NUMBER 55 C
AUTOMATIC DEPOSIT IS MADE ON EACH CREDIT CARD TRANSACTIO N CLEARED 55 D
THE PROCESSOR SELECTS THE FLORIST AND ACTIVATES THE MODEM; ORDER IS SENT DIRECTLY TO THE DELIVERING FLORIST 56 A
CUSTOMER HAS OPTION TO SPEAK DIRECTLY TO THE FLORIST FILLING THE ORDER 57
OR CUSTOMER HAS OPTION TO SPEAK TO A CUSTOMER FLORAL CONSULTANT 58 A
PRINTER ACTIVATES & RECEIPT IS PRINTED WITH THE COMPLETE ORDER INFORMATION ALONG WITH THE COST, CONFIRMATION AND THE DELIVERING FLORIST NAME ADDRESS PHONE NUMBER 59 A
ORDER, SELECTION, RECEIPT & SENDING PROCESS COMPLETED; RETURN TO ORDER ENTRY FOR ANOTHER ORDER 60

FIG. 7

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/11964

A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :G06F 17/60; A47F 3/04; G07F 7/04
US CL : 364/401, 403, 404, 408; 62/255; 194/4

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 364/401, 403, 404, 408; 62/255; 194/4

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

None

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

USPTO - APS
search terms: floral, flowers, vending machine

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,440,479 A (HUTTON) 08 August 1995 (08/08/95), see entire document.	1-29
Y	US 5,146,709 A (ISEKI) 15 September 1992 (15/09/92), see entire document.	1-29
Y	US 4,953,363 A (PRIMOZIC) 04 September 1990 (04/09/90), see entire document.	1-29
Y	US 4,311,227 A (WATKINS) 19 January 1982 (19/01/82), see entire document.	1-29

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search 28 JULY 1999	Date of mailing of the international search report 03 NOV 1999
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703) 305-3230	Authorized officer DOUGLAS X. RODRIGUEZ Telephone No. (703) 308-4081

Form PCT/ISA/210 (second sheet)(July 1992)*